## Abstract of the Disclosure

When microbial contamination is introduced into a room (20\*) of an enclosure, such as a building, an HVAC system including supply ductwork (16) and a return ductwork (34) is decontaminated with hydrogen peroxide 5 A decontamination controller (46) operates controllable baffles (22) at outlet registers temporary controllable baffles (44) at inlet registers (30), and a blower system (10) to circulate hydrogen peroxide vapor from hydrogen peroxide vapor generators 10 (42) through the ductwork in both forward and reverse directions. Further, at least portions of the baffles are closed to create dwell times in which the hydrogen peroxide vapor resides in the ductwork with minimal or turbulent flow.